

REMARKS/ARGUMENTS

The Examiner is thanked for the Office Action mailed July 27, 2009 and for the telephone interviews of October 13 and October 16, 2009. The status of the application is as follows:

- Claims 1-20 are pending, and claims 1, 8 and 10-13 have been amended;
- Claims 1-6, 8-15 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti et al (6,622,012), hereinafter Bilotti, in view of Finch et al (4,365,196), hereinafter Finch.
- Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Finch, in view of Deczky (4,294,682), hereinafter Deczky.
- Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Finch, in view of Bartingale et al (US 2003/0048102), hereinafter Bartingale.
- Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Finch, in view of Sunter et al (5,323,011), hereinafter Sunter.
- Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Finch, in view of Lemke et al (4,323,890), hereinafter Lemke.

The objections and rejections are discussed below.

The Rejection of Claims 1-6, 8-15 and 19-20 under 35 U.S.C. 103(a)

Claims 1-6, 8-15 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti et al (US Pat. No. 6,622,012) in view of Finch et al (US Pat. No. 4,365,196). This rejection should be withdrawn because the combination of Bilotti and Finch does not establish a *prima facie* case of obviousness with respect to the subject claims as presently amended.

The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed. *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007). MPEP §2143.

"To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or

impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). MPEP §706.02(j).

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). MPEP §2141.02 VI.

Claim 1 as amended claims an apparatus that includes (1) an element mounted in one of first and second members movable one relative to each other, the element adapted to initiate an action in the apparatus; (2) a detector mounted in the other of the members and which *responds to a proximity* of and detects an intensity of interaction with the element; (3) an inhibitor mounted in one of said members which *selectively* inhibits the intensity of interaction between said element and said detector to prevent said detector from responding to the proximity of the element; and (4) a processor configured to determine a *detection state* of the detector and drive the inhibitor to selectively inhibit the intensity of interaction of the detector and the element based on an *output of the detector* and the determined detector *detection state*.

The combination of Bilotti and Finch does not teach or suggest the claimed invention. The examiner concedes that Bilotti does not disclose or teach the claimed inhibitor, but asserts that Finch "teaches a system and method for an inhibitor (figure 4 element 9) mounted in one of the members which selectively inhibits the intensity of interaction between the element and the detector in response to the element being moved into the proximity of the detector (col. 2, lines 16-30 and col. 3-4, lines 25-25)."

However, the figure 4 element 9 of Finch is not an inhibitor which selectively prevents a detector from responding to the proximity of the element in response to said element being moved into the proximity of the detector as specifically claimed by amended claim 1. Instead, the figure 4 element 9 is a *field disturbing means 9*, which when energized to place the disclosed transducer apparatus 1 into a "checking mode" creates a field which, taken together with the field created by a field creating means 3, causes the Finch sensing means 5 (i.e. detector) to change to another state in order to enable checking of the operation of the Finch transducer assembly 1. It

is important that even in this changed state the sensing means 5 still detects the presence/proximity of the article 7, for example enabling the detection of the presence of a train at all times and especially even while the checking process is taking place. Even if the Finch field disturbing means 9 is energized and changes the state of the Finch sensing means 5 in a "checking mode," while in this checking mode the sensing means 5 still senses the proximity of the article 7. (Finch, col. 4, lines 32-47.) Thus, the field disturbing means 9 is not configured to prevent the sensing means 5 (detector) from responding to the proximity of the article 7 (element), which is important under the teachings of Finch in order to ensure that the transducer apparatus 1 continually detect and respond to the proximity of the article 7 both in normal operational and in checking mode:

It will be apparent that the checking facility provided by the additional field creating means 9 is in *contrast* to any checking which can be provided by a switch, such as a Live-Rail track switch, *as the Live-Rail track switch cannot be checked while the article, such as a train, is present*. Further, the system of creating a further field by the additional field creating means 9 simultaneously checks the magnetic circuit so there is a double check.

(Finch, col. 4, lines 10-18.) If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984), MPEP §2143.01 V. Moreover, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). (MPEP §2143.01 VI). As it is unambiguously required that the Finch field disturbing means 9 not prevent the sensing means 5 (detector) from responding to the proximity of the article 7, said references cannot be modified to teach the invention claimed by amended claim 1 to one skilled in the art without rendering the prior art *unsatisfactory* for its intended purpose.

Further, any change of state effected the sensing means 5, and thus any change in character of the interaction of the sensing means 5 and the article 7, is effected whether or not the article 7 to be detected is within proximity of the sensing means 5: therefore, the state changing is independent of and not responsive to the article 7 being moved into the proximity of the sensing means 5, which again thus teaches away from the invention specifically claimed. (See Finch, col. 3, line 50 through col. 4, line 18).

Further, as amended, the processor claimed determines a *detection state* of the detector and drives the inhibitor accordingly: to selectively inhibit the intensity of interaction of the detector and the element based on an output of the detector *and* the determined detection state. Thus, in one exemplary but not exhaustive embodiment, false positive events are avoided when the determined detection state indicates that a noisy detector state is present rather than a proximate other element. See the originally-filed specification as published as US Patent Publication No. 20040227407 at paragraph [0012] and the “noise flag” process and system embodiment of paragraphs [0034]-[0038].

Therefore, it is clear that the combination of Bilotti and Finch does not establish a *prima facie* case of obviousness with respect to amended claim 1 pursuant to the requirements of MPEP §2143.01 VI, and that the claim limitations presently before the examiner are allowable over Bilotti in view of Finch under 35 U.S.C. 103(a). Bilotti and Finch were thus distinguished in the telephone interview with the examiner on October 16, 2009, and the examiner agreed that claim amendments proposed to claim 1 would traverse the present rejections over Bilotti and Finch but expressed concerns as to the specific language proposed. The amendments have been revised to address the examiner’s concerns with respect to selectively inhibiting the detection of the element, and are believed to now place claim 1 in allowance over the prior art of record.

Amendments to claim 1 also correct minor informalities of drafting, and the limitations regarding the processor selectively driving the inhibitor to prevent the detector from responding to the proximity of the element are supported by the originally filed specification: for illustrative but not exhaustive examples, see the originally-filed specification as published at paragraph [0032] and the “noise flag” process and system embodiment discussed in paragraphs [0034]-[0038]. Thus, the present amendments to claim 1 does not constitute new matter and are rightfully entered hereby.

Claims 2-4, 6, 8-15 and 19-20, as previously presented or presently amended, each directly include in independent form or incorporate through respective dependencies limitations analogous to those discussed above with respect to amended claim 1 and distinguished over Bilotti in view of Finch. As such, the above discussion with respect to claim 1 applies *mutatis mutandis* to each of said claims, and the rejections of claims 2-4, 6, 8-15 and 19-20 over Bilotti in view of Finch under 35 U.S.C. 103(a) should be withdrawn and said claims allowed.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Finch, in view of Deczky (US Pat. No. 4,294,682). Claim 5 depends from amended claim 1 and therefore incorporates through its dependency the limitations discussed above and distinguished over Bilotti in view of Finch with respect to amended claim 1. Deczky has not been cited by the examiner to cure the deficiencies noted in the above discussion, nor does it. Therefore, the above discussion with respect to amended claim 1 applies *mutatis mutandis* to claim 5, and the rejection of claim 5 over Bilotti in view of Finch and Deczky under 35 U.S.C. 103(a) should be withdrawn and said claim allowed.

Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Finch, in view of Bartingale et al (US Patent Application 2003/0048102), hereinafter Bartingale. Claims 16 and 18 each incorporate through their respective dependencies the limitations discussed above and distinguished over Bilotti in view of Finch with respect to amended claim 1. Bartingale has not been cited by the examiner to cure the deficiencies noted in the above discussion, nor does it. Therefore the above discussion with respect to amended claim 1 applies *mutatis mutandis* to claims 16 and 18, and the rejection of claims 16 and 18 over Bilotti in view of Finch and Bartingale under 35 U.S.C. 103(a) should be withdrawn and said claims allowed.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Finch, in view of Sunter et al (US Pat. No. 5,323,011), hereinafter Sunter. Claim 17 incorporates through its dependency the limitations discussed above and distinguished over Bilotti in view of Finch with respect to amended claim 1. Sunter has not been cited by the examiner to cure the deficiencies noted in the above discussion, nor does it. Therefore, the above discussion with respect to amended claim 1 applies *mutatis mutandis* to claim 17, and the rejection of claim 17 over Bilotti in view of Finch and Sunter under 35 U.S.C. 103(a) should be withdrawn and said claim allowed.

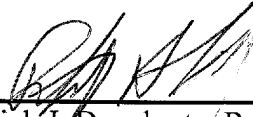
Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Finch, in view of Lemke et al (US Pat. No. 4,323,890), hereinafter Lemke. Claim 7 incorporates through its dependency the limitations discussed above and distinguished over Bilotti in view of Finch with respect to amended claim 1. Lemke has not been cited by the examiner to cure the deficiencies noted in the above discussion, nor does it. Therefore, the

above discussion with respect to amended claim 1 applies *mutatis mutandis* to claim 7, and the rejection of claim 7 over Bilotti in view of Finch and Lemke under 35 U.S.C. 103(a) should be withdrawn and said claim allowed.

Conclusion

In view of the foregoing, it is submitted that the claims distinguish patentably and non-obviously over the prior art of record, and the examiner is encouraged to call the undersigned if any further minor issues amenable to examiner amendment arise during examination. An early indication of allowability is earnestly solicited.

Respectfully submitted,



Patrick J. Daugherty, Reg. No. 41,697
440-391-5100

CUSTOMER NO. 56687